bones and is important since the process may be arrested by treatment with sodium fluoride in high doses.

Treatment of mild fluctuating vertigo with regular administration of meclizine has seemed more effective in this writer's experience than only using the drug intermittently when symptoms escalate. For the treatment of acute vertigo with severe vomiting, the drug droperidol (Inapsine®), used often after surgical operation, is a very powerful and effective vestibular suppressant. Also, McCabe has found that intravenous administration of diazepam (Valium®) is extremely effective for acute vertiginous crises.

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Isaacs' Syndrome

THE CLINICAL FEATURES of this rare syndrome include chronic, painful muscle stiffness, fasciculations and myokymia, often with associated muscle atrophy, weakness, excessive perspiration and increased basal metabolic rate. Age of onset ranges from the newborn period to the sixth decade, with the peak incidence in the second and third decades. Symptoms tend to be static or slowly progressive. Findings on an electromyogram show continual motor unit potentials in the involved muscles despite a voluntary effort to relax.

Isaacs and several subsequent investigators showed that muscle stiffness and electromyographic activity continued after spinal anesthesia or peripheral nerve block but were abolished by curare. This has been interpreted to indicate that the muscle symptoms are due to abnormal discharges at the termination of the nerves. Abnormal findings on nerve conduction studies, neuropathic changes noted in sural nerve and results of muscle biopsy studies more recently have been reported as further evidence suggesting an underlying peripheral nerve disorder.

Isaacs found that dipenylhydantoin (Dilantin®) ameliorated most of the symptoms. In some cases, refractory to diphenylhydantoin, patients have responded well to carbamazepine (Tegretol®). The experimentally shown capability of diphenylhydantoin to stabilize motor nerve terminals and muscle membranes may explain the therapeutic effectiveness of this drug.

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Steroid Therapy of Myasthenia Gravis

CORTICOSTEROIDS have been used in the treatment of myasthenia gravis since the late 1940's. Most studies have concluded that steroid therapy led either to short-term benefit or, more commonly, to exacerbation of symptoms. Early observations were based on the administration of high doses given for brief periods. Recently the long-term use of appropriate doses of adrenocorticotropic hormone (ACTH) and adrenocorticosteroids has been found to be effective in suppressing the symptoms of the disease.

When large doses of steroids (100 mg) are given alone on alternate days, symptoms frequently exacerbate and patients become extremely weak—frequently requiring admission to hospital and occasionally tracheostomy for respiratory support. Worsening of symptoms can be either lessened or avoided altogether when prednisone is administered in 25 mg doses on alternate days while the patient is maintained on an effective dose of anticholinesterase medication. Subsequently, the dose of prednisone may be gradually increased while anticholinesterase medication is decreased until maximum symptomatic benefit is achieved. In some patients it may not be possible to reduce anticholinesterase medication significantly. The alternate day steroid treatment reduces the occurrence of untoward endocrinological side effects. Once the symptoms of myasthenia gravis have remitted, it may be possible to reduce and eventually stop anticholinesterase medication while maintaining the patient on smaller doses of